

PA Emergency Management Agency

Disaster Preparedness Planning Guide For Facilities

INTRODUCTION

This preparedness planning guide is directed to facility managers and administrators and is intended to provide assistance in meeting the planning requirements necessary to protect employees and clients who may be conducting business within the facility. It is intentionally generic in nature, so that it may apply to a variety of public buildings and large facilities where resident or worker populations may be at risk as a result of natural or human-caused disasters. Effective planning and response is achieved by coordination, cooperation and the participation of many groups, individuals and the community. A highly effective planning and response team can be formed between the facility staff and community groups.

I. Everybody Has a Role in Disaster Planning and Response

A. The Facility Manager

1. Acts as facility Emergency Management Coordinator (EMC).
2. Coordinates development of the disaster plan with municipal emergency management officials to make sure that it is compatible with the municipality's Emergency Operations Plan.
3. Provides leadership in the development of the facility's disaster plan and emergency preparedness education.
4. Assigns selected facility staff members the responsibility for developing the disaster plan.
5. Assigns emergency responsibilities to staff members as required and with regard to individual capacities and normal service function.
6. Secures necessary in-service training for staff members.
7. Conducts drills and initiates needed plan revisions based on drill evaluations.
8. Arranges for the procurement, storage and maintenance of emergency supplies and equipment. Supplies may include necessary medications for residents, and a power generator, of appropriate capacity and fuel to operate it for a 24-hour period.
9. Arranges for the installation of an emergency warning system.
10. Keeps resident and staff members informed of emergency plan revisions.
11. Supervises periodic safety checks of the physical facility, equipment and vehicles.
12. Provides copies of the disaster plan to the municipal Emergency Management Agency (EMA).

B. The Facility Professional Staff

1. Participates in developing the facility's disaster plan.

2. Participates in emergency preparedness in-service training programs.
3. Helps occupants develop confidence in their ability to care for themselves.
4. Provides leadership during a period of enforced confinement during an emergency.

C. Facility Maintenance Personnel

1. Inspects the facility for structural safety and report defects.
2. Identifies shut off valves and switches for gas, oil, water and electricity. Posts a chart showing shut off locations so that others can use them in an emergency.
3. Provides cut off valves for steam lines in shelter areas.
4. Provides for emergency operation of the ventilating system.
5. Displays locations of all protective equipment.
6. Instructs all staff members on how to use fire extinguishers.
7. Maintains an inventory of tools and equipment.
8. Inspects and tests the emergency generator on a regular basis.
9. Advises management of hazardous and protective areas in facility, and where the available emergency equipment and alternate power sources are located.

D. Facility Food Service Personnel

1. Maintains adequate supplies of non-perishable food and water for emergency use. Prepares a list of needed food supplies and a reliable source for supplies that can make them available under emergency or disaster conditions.
2. Rotates supplies to assure freshness.
3. Trains in using mass feeding practices under emergency conditions.
4. Practices kitchen safety laws, rules and regulations at all times.

E. Community

1. The community is a valuable resource for:
 - a) Warning
 - b) Resources
 - c) Information
 - d) Educational material
 - e) Other related activities
2. This assistance should come, primarily, from:

- a) Municipal Governments
- b) Emergency Medical Services
- c) Law enforcement agencies
- d) Fire departments

3. Other possible sources of assistance include:

- a) Individuals
- b) Churches
- c) Civic clubs and organizations
- d) Businesses and industries
- e) Hospitals
- f) Local Red Cross, Salvation Army or other voluntary service agencies

II. Preparing the Disaster Plan

Facility management personnel have a responsibility to staff members, occupants, patrons and anyone who happens to be in their facility, to develop a disaster plan. Authority for the plan and its implementation should be established and the circumstances during which emergency procedures are to be followed must be identified. An awareness of the natural and human-caused hazards likely to occur in a particular area and a thoughtful assessment of the facility and available resources - both material and human - are required.

A. Plan Content: It is important that facilities have a comprehensive written plan with procedures to be followed when an internal or external disaster occurs. The plan should be rehearsed periodically.

1. It should contain a section in which the unique needs of the facility's residents are identified and assessed.

2. As a minimum, the following emergency situations should be addressed:

- a) Fire and explosion;
- b) Severe weather situations;
- c) Utility failure;
- d) Hazardous materials and radiological emergency;
- e) Acts of terrorism or civic unrest;
- f) Any other emergency that may directly impact the facility.

3. For the above emergencies, there may be common functional responses. (e.g., The same evacuation procedures will work for a fire or a severe storm.) The plan should include detailed emergency procedures or checklists that are easily understood. A standardized format should be used throughout the plan that clearly establishes how procedures will be carried out. The procedures should answer the questions "who, what, when, where and how" and allow the facility staff members to be ready to act effectively in an emergency situation.

4. The above procedures should also address, as a minimum:

- a) Assignment of responsibility to staff members.
- b) Special needs of clients or employees.
- c) Notification of municipal emergency services.
- d) Provisions to shelter people inside the facility if it's more dangerous outside.
- e) Alternate living arrangements if the sheltering is required for a period of a few days.
- f) Evacuation plans if it's necessary to leave the facility.
- g) Arrangements for transportation if it is necessary to evacuate to a remote location.
- h) Protection of valuable records.
- i) Emergency energy sources.

5. If portions of a facility's plan are contingent on the resources or services of another facility or organization, the facility must execute a written agreement with the other party or parties that acknowledges their participation in the plan. This mutual agreement should be part of the plan.

B. Plan Specifics:

- 1. A description of how the facility is to receive notification of an actual or impending disaster/emergency.
- 2. A description of how facility management will communicate the warning to occupants of the facility.
- 3. A list of emergency telephone numbers, including the administrative chain-of-command and community emergency services.
- 4. An identification of designated shelter areas or best protective areas inside the facility.
- 5. An identification of evacuation assembly areas outside of the facility.
- 6. A description of the organization and action of staff members and other occupants in moving to shelters or evacuating and moving to host facilities.
- 7. A list of responsibilities and assignments(s) of staff members for anticipated emergency situations.
- 8. A description of education, training and drills required to assure effective operation of the plan.
- 9. A provision for periodic review and revision.

C. Planning Recommendations: The ideal plan is easy to find and easy to read during an emergency. You must keep in mind that the plan must be specific enough to give directions for immediate action, but flexible enough to allow for changes as unexpected situations develop.

The planners should strive for simplicity and clarity. A few hints to consider are:

- 1. Provide space for the phone numbers of key responding personnel and alternates.
- 2. Step-by-step procedures should be as simple as possible so that they are clear to

someone unfamiliar with the plan.

3. Whenever possible, save time and avoid confusion by developing standard procedures for various situations.

4. Staff responsibilities should be as close as possible to "normal" jobs so staff members are familiar with their emergency location and responsibilities.

5. Use checklists to ensure that infrequently-practiced emergency jobs are done correctly.

D. The Planning Team

The Facility Manager should select a limited number of staff members to participate in the development or revision of the disaster preparedness plan. It is suggested that the manager, or the person designated to act in his/her absence, acts as the Chairperson of the disaster response planning committee. Part of the Chairperson's duties will be to secure the counsel and assistance of the municipal Emergency Management Coordinator (EMC) and other agencies.

E. Supporting Information: A comprehensive plan should be derived from a variety of sources. Much of the information gathered to assist in the planning will also be useful in emergency response.

1. Planners should know the history of natural or man-made disasters which have affected the facility and community. Local historical clubs, emergency service agencies, libraries and newspaper files are all good sources of information.

2. Climatic data can be supplied by local weather stations. Planners should know the general weather and climatic patterns of their area. All parts of Pennsylvania are subject to severe weather, but vulnerability to different types of weather varies widely across the State.

3. Topographic and street maps can be used to assess vulnerability to hazards such as floods, landslides, forest fires and transportation accidents which may involve dangerous materials. They may also aid in planning traffic flow in case an evacuation is necessary.

4. Facility floor plans and blue prints offer planners a summary of building features so that shelter areas can be determined and evacuation routes planned to avoid hazardous areas (boiler rooms, etc.) and take advantage of safety construction (fire walls, etc.).

5. Charts are also valuable when planning or during actual emergencies. Organizational charts outline responsibilities associated with job titles and list names, titles, addresses and phone numbers of key personnel. For the planner, charts are useful lists of human and physical resources available for action. During actual emergencies, the charts, prominently displayed on a wall, provide the necessary information at a glance. Even someone unfamiliar with the plan should be able to use them to summon help. Information on the charts and maps should be kept as simple as possible. Visual effectiveness can be increased by using color codes and large uncomplicated symbols.

6. A current list of names, addresses and phone numbers for staff members and emergency service agencies should be developed and maintained. A pocket card listing this key information should be given to staff members for quick reference.

F. Hazard Assessment: Writing the plan is preceded by a careful assessment of the facility and its county, region or metropolitan area. Using the assembled maps, local history and climatic data, planners should determine planning priorities. While all hazards should be addressed, the greater effort will be devoted to those emergencies most likely to occur. The hazard assessment should include:

1. Evaluation of the building and site, including inspection of the grounds.
2. Evaluation of the surrounding area in terms of vegetation, buildings or activities which may be potential hazards. Locate pipelines, rail lines and highways that are used for the transportation of hazardous materials. Note storage areas and industries that have hazardous or radioactive materials.
3. Evaluation of the community and region. Consider natural phenomena such as tornadoes, hurricanes and flash flooding.

III. Parts of the Plan

While the actual appearance of the plan may vary, you should consider each of the following for inclusion:

A. Purpose Statement: A brief explanation of the reason for writing the plan, and the circumstances under which it should be used.

B. Authority: A statement by executive management that this plan has the procedures to be used during emergency.

C. Basic Concepts: A brief description of how the facility will respond.

1. Who will be responsible for the response? Where will that person be positioned? Will there be some sort of emergency operations center?

2. Describe the difference between sheltering and evacuation, Who will make that decision.

3. Also describe any special teams (e.g.: fire brigade) which will play a part in the response.

D. Emergency Functions: There are several functions that need to be accomplished during emergency response that are common to virtually all emergencies. Rather than repeat the instructions for each disaster, it is easier to organize the plan according to emergency functions. Different facilities may have different circumstances, so all of the following may not be needed, or others may need to be added.

1. Direction and Control: Emergency decisions will need to be made, and everyone in the facility must know what those decisions are and who makes them.

a) Your plan should specify who will be in charge (with an alternate) and where that person will be positioned. This "command post" should have adequate communications and be easy to find (the office, the main entrance) An alternate command post should be designated in case an evacuation is needed.

b) Emergency service organizations use a control system called the "Incident Management System." This lets all of the responders know who is in charge. It breaks each unit into sections or divisions so each leader has a manageable span of control, not greater than seven. You should become familiar with the incident management system, and be prepared to interface with it when emergency responders arrive at your facility. In some situations, the incident commander may need a facility representative as part of a unified command.

2. Warning and Communication: It is imperative that all staff members know how a warning is received and transmitted on to the occupants. Each facility should test their equipment regularly and consider obtaining additional communications equipment, if necessary. For example, having only telephones available for communications is inadequate during an emergency because that is when the demand for phone lines and cell-phones is greatest. Each facility should have an alternate warning system which can alert the entire facility in the event of a power failure. Every facility should also establish a manually operated backup warning system.

3. Evacuation and Transportation: Effective procedures for the orderly evacuation of a facility to a safe area are paramount. Evacuation plans should be designed to evacuate the facility as quickly and safely as possible. As a minimum, they should be coordinated with local government.

a) Evacuation Instructions should:

- (1) Be given to all new staff members when hired.
- (2) Be displayed by fire exits.

b) Evacuation routes should:

- (1) Take advantage of natural protective features (i.e., fire walls).
- (2) Avoid hazardous areas, such as wooden stairs, open stairwells and boiler rooms.
- (3) Be designed so there is no cross traffic.

c) Whenever possible, residents who are disabled or bedridden should be assigned to ground floor rooms that are the closest to exits or to rooms which open directly to the outside.

d) Plans should include each staff member's role in evacuating the building, such as designating who should:

- (1) Check rest rooms, vacant rooms, locker rooms, storage areas and other spaces which may be occupied by residents, visitors or staff members.
- (2) Close windows and doors when leaving.
- (3) Lead evacuation lines.
- (4) Assist occupants who are elderly, or disabled.

(5) Guard exits to prevent unauthorized persons from entry into building.

e) Evacuation should be conducted:

- (1) In orderly lines; no running.
- (2) Quietly with no talking to minimize confusion and allow for changes in orders to be heard.

f) Establish procedures to safeguard records.

g) Establish procedures for shutting down utilities.

h) If local EMA/emergency services are going to help provide transportation, they will need to know:

- (1) The number of persons who will need municipal transportation during an emergency. This should exclude those who have their own transportation, or who will rely on family or friends and those who can be transported in facility-operated vehicles.

- (2) Estimates of the number of ambulatory and non-ambulatory occupants, or any with special needs.

i) Because emergency procedures may require transportation at irregular hours, a list of the following information should be available:

- (1) The number and capacity of facility owned and/or contracted transportation available for an immediate or delayed response to an emergency call. The names of operators and contact procedures should be included.

- (2) The number and capacity of vehicles with life support equipment, ramps or hydraulic equipment that may be needed.

4. Shelter in the Facility

If it is unsafe for the occupants of the facility to go outside, provisions should be made to provide "protected spaces" inside.

a) These spaces should:

- (1) Be in the interior of the building, away from glass that may shatter.
- (2) Not be in rooms with large ceiling spans (like gymnasiums or auditoriums) that may fall if subjected to shaking from an earthquake or tornado.
- (3) Have furniture and wall-hangings secured so that they will not fall onto occupants

b) Suggestions on where to find these "protective spaces" are:

- (1) In multi-story facilities.

- (a) Use identified shelters or basements.

- (b) Use first floor interior halls,
- (c) Use rest rooms or other enclosed small areas away from large glassed-in areas of large open rooms.

(2) In one-story facilities.

- (a) Use identified shelters.
- (b) Use basements and interior hallways.
- (c) Use rest rooms or other areas away from large glassed-in areas or open rooms.
- (d) If hallways are not suitable, use the inside wall of a room on the opposite side of the corridor from which the storm is approaching.

(3) In either one or multi-story facilities rest rooms are usually suitable, especially if the room is centrally located.

c) Diagram the facility and indicate which areas are to be used as shelters and the quickest way to get there.

d) Check the space available and number of residents who will use each area (match people with space). Practice drills will help decide how many rows of residents can be placed in a protective area. Designate staff to be responsible for operating the shelter

e) Accountability for personnel is essential. Procedures should assign all occupants to a shelter, and make provisions to report to the facility manager those persons who are in the protected area.

f) If personnel are not being sent outside because of smoke or toxic chemicals, all air intakes and openings should be closed to protect the atmosphere inside.

g) Display a copy of the shelter plan in the Administrator's office.

h) Display in each room in the facility a copy of the floor plan indicating the location of the shelter to be used by the residents in that room.

i) Provide a copy of this information to the municipal EMC.

5. Shelter outside the Facility

a) If the facility has full-time residents, provisions must be made to shelter them if evacuated. Accountability procedures should be established to ensure that all staff and employees are safe. Some may have prior arrangements with family and others may have pre-arranged for a site, such as a school building, where refuge will be provided. A possible plan is the use of public shelters. The facility's Emergency Manager should work closely with the municipal EMC to explore these options and others.

b) The plan should contain an estimate of how many residents will need to be sheltered in:

- (1) A municipal shelter facility.
- (2) A hospital, due to residents' special needs.

c) Contact local school boards, churches and organizations, such as the local American Red Cross Chapter, to learn what buildings could be used as shelters.

d) If a facility agrees to provide emergency shelter for residents of a threatened facility, it is imperative that the host and the evacuating facility define and agree upon their respective responsibilities in an emergency situation by executing a formal agreement.

E. Staff Training and Drills: Training and Drills are essential to having an effective response in times of an emergency.

1. Pre-emergency training for each staff member with an emergency duty should be required and supplied by the facility. Instruction should be given as part of a continuous training program. It should develop an awareness in all staff members of potential hazards and what measures to take to protect life and property. Training should also acquaint them with an understanding of warnings and public information announcements.

2. Exercises, drills and tests are vital parts of training and should be utilized once the staff has been trained as in the procedures to follow and their respective roles.

a) Testing and Evaluating Response Procedures

(1) Drills should be carried out frequently so that everyone is familiar with the procedures.

(2) The first drill of each calendar year may be announced so that instructions can be given and procedures established. Procedures, not time, should be the most important aspect of this drill. Additional drills should be conducted with time as the important element.

(3) Conduct drills at various times during the year. Some hazards are seasonal, but disaster has no calendar

b) Drill evaluations

(1) Use residents, staff members and administration as evaluators.

(2) Consider using municipal emergency service response agencies.

(3) Use of a checklist or questionnaire.

(4) Additional comments and recommendations should be elicited from all participants.

(5) Records should be kept and copies made available to the facility Emergency Management Coordinator and committees.

3. Training and drills should be accomplished through brief workshops and in-service training periods.

IV. Guidelines for Specific Hazards

Even with plans based around emergency functions that are usable for a variety of emergencies, it's still helpful to understand a little about the types of emergencies that can impact the facility. Your hazard analysis may show that there are others, but these emergencies are among the most frequent in Pennsylvania.

A. Fires and Explosions: Fires and explosions are an ever present danger. They may originate within the building or threaten from without. A small fire in a rural wooded area or a built up urban area can quickly get out of control and threaten a nearby facility. Internal fires may result from a variety of factors, ranging from carelessness to arson. Explosions and resulting fires may be caused by leaking gas lines or faulty heating systems.

1. Warning and Communication

- a) Ensure that the alarm system is in good working order.
- b) In case of a malfunction, an alternate signal should be available (cowbell, whistle, bull horn, etc.).

2. Preparation

a) Equipment

- (1) Staff members and residents should be familiar with the location and operation of alarms and extinguishers.
- (2) All equipment (including extinguishers, sprinkler systems, fire doors, etc.) should be regularly maintained in accordance with State and municipal ordinances.

- b) Training: Appoint a "fire brigade" to try to fight fires while the majority of people evacuate. All members should be thoroughly trained in the differences in the types of fires (electrical, oil, chemical, etc.) and the various materials and equipment available to combat each type of fire, including commonly available substances and materials (baking soda, sand, water soaked blankets, etc.).

3. Response

- a) When a fire is discovered, an alarm should be sounded and the fire department notified without delay.
- b) Evacuate the building immediately, using the building evacuation plan.
- c) Time permitting, windows should be closed.

B. Severe Storms Thunderstorms are a frequent occurrence in Pennsylvania. Tornadoes and tropical storms are less frequent, but, because of their potential to do damage, all are worthy of our attention. Thunderstorms bring with them intense rain, lightning, damaging wind in excess of 50 mph and hail. Winds in tropical storms can get up to 100 mph. Under certain climatic conditions, thunderstorms can be a prelude to a tornado, which can generate whirling winds in excess of 200mph. Tornado damage can be very localized, while a hurricane can devastate several states. Intense rain can cause rapid rise in streams and severe flooding. While tornadoes strike with very little warning, we normally get some warning for thunderstorms, and tropical storms are tracked for days before they get to the northeast.

- 1. Warning: The facility should monitor National Oceanographic and Atmospheric Administration (NOAA) weather radio or a local radio/TV station for public warnings when weather conditions indicate. Outside sirens ARE NOT sounded unless there is a danger of a tornado. The National Weather Service (NWS) issues the following advisories:

- a) Severe Thunderstorm Watch: Indicates that weather conditions are such that a thunderstorm may develop.
- b) Severe Thunderstorm Warning: Indicates that a severe thunderstorm has developed and will probably affect those areas stated in the bulletin.
- c) Tornado Watch: Means that weather conditions are such that a tornado may develop.
- d) Tornado warning: Means that a tornado has been sighted or indicated on RADAR and protective measures should be taken immediately.
- e) Tropical Storm Watch: Means that conditions indicate that a storm is possible, but has not yet occurred.
- f) Tropical Storm Warning: Means that a series of weather conditions have developed with the potential to cause serious and a tropical storm is expected to strike the area within 24 hours. It contains an assessment of flooding dangers, high wind warnings for the storm's periphery, estimated storm effects and recommended emergency procedures.

2. Preparation

- a) Have the facility evaluated for its ability to withstand high winds.
- b) Identify and designate the best internal protective areas within the facility.
- c) If the facility is in a particularly hazardous area, keep materials on hand to tape and/or board up windows, and provide other protection to the facility and outdoor equipment, as necessary.
- d) All staff members and residents should know the "symptoms" of severe thunderstorms and tornadoes.
- e) Selected staff members should be trained as "severe weather watchers" or "tornado spotters" and know how to use the facility's warning and communication system. Know the history of tropical storms in the area and elevation of the facility above streams and rivers that may flash flood.
- f) Know safe evacuation routes to official shelters.

3. Response

- a) When you receive a tornado warning or if a tornado sighting is reported, residents and staff members should seek shelter WITHIN the building or in a designated tornado shelter.
- b) If your facility has a tornado alarm system, it is important that the sound of this alarm not be confused with that of a fire alarm or any other evacuation signal.
- c) During a severe thunderstorm warning, or during periods of particularly high winds, keep residents away from glassed-in areas.
- d) Every facility should also establish a manually operated backup warning system.
- e) During the watch, store portable equipment, outdoor furniture, etc., inside the facility away from shelter areas.
- f) During the warning, secure or store articles which may act as missiles.
- g) If there is insufficient time to take shelter,
 - (1) Go to the inside wall of a room away from windows.
 - (2) Sit or crouch on the floor next to an inside wall or get under tables or other furniture by sitting or lying prone on the floor, face down.
 - (3) If a large book can easily be picked up, hold it over the head.

C. Flooding: Because of its vast network of rivers, creeks and streams, the State is considered to be flood prone. Flooding may be caused by heavy rains, fast snow melts or dam failures. When this occurs, the natural waterways can become raging torrents capable of great destruction.

1. Warning: Except in the case of flash flooding, the onset of most floods is a relatively slow process with the buildup taking several days. Progressive situation reports are available from the NWS and the River Forecast Center district office of the NOAA.

a) Flash flood watches are issued by the NWS to the public by radio/TV stations. A watch means that flooding MAY occur.

b) Flash flood warnings are issued by the NWS to the public by radio/TV stations when flooding is actually occurring. Many municipalities have local flash flood warning systems to assist in the dissemination of this information.

2. Preparation.

a) Know what a forecast river height means as it relates to the facility. Helpful information includes:

(1) Knowledge of local elevations.

(2) Knowledge of how elevations relate to river gauges from which a forecast is prepared.

(3) Know whether or not the facility is in a flood plain.

3. Response

a) Evacuate residents to shelters.

b) Shut off water at mains so contaminated water will not back up into facility supplies.

c) Pack refrigerators and freezers with dry ice to protect food supplies should power be lost.

4. After a flood

a) Beware of contaminated food, water, broken gas lines and wet electrical equipment.

b) Re-enter the facility only after it is determined that is safe to do so.

D. Winter Storms: The dangers of are the intense cold, snow, ice, breakdown of transportation due to road conditions and disruption of electrical power. These conditions may incapacitate an area, making transportation difficult and disrupting utility service.

1. Warning: Snow and ice storm watches and warnings are issued by the NWS. When such weather threatens, monitor a local radio/TV station for bulletins.

2. Preparation

a) Establish procedures for securing the facility against damage to utilities (frozen water pipes, etc.).

- b) Prepare the facility's vehicles for emergency travel on ice and snow (tire chains, etc.).
- c) Check emergency and alternate utility sources. Possibly the greatest hazard in severe weather is the loss of electrical power. Provisions should be made for an emergency power generator capable of maintaining power for heating and emergency lighting.

3. Response

- a) Conserve utilities by maintaining the lowest temperature consistent with health needs.
- b) Take pre-determined measures to secure the facility against storm damage, prevent bursting pipes, etc.

E. Hazardous and Radioactive Materials: Many types of hazardous substances including radioactive materials are shipped daily across the state. The chances that a facility may be affected by an accident involving these materials becomes greater with the continuing growth of industry, Municipal EMCs and fire departments maintain information concerning extremely hazardous and radioactive materials that are stored, used or manufactured in the area. Accordingly, facility emergency planners should coordinate with these municipal officials.

1. Warning: Warning of a hazardous or radioactive material incident is usually received from the fire or police department or the EMA when such an incident occurs close to or on facility property.

2. Response

- a) Determine whether it is safer to shelter occupants or to evacuate the facility.
- b) If it's necessary to evacuate the area, move crosswind; never directly into or against the wind which may be carrying fumes. Upon reaching a point of safety, take a roll call.
- c) Occupants must not return until the emergency services personnel have declared the area to be safe.

F. Earthquakes: Parts of the State have experienced minor earthquakes. Individuals who have experienced them can attest to the fact that even a mild one can be frightening. This is particularly so if one is not informed of the precautions to take.

1. Warning: Earthquakes generally occur without warning. Seismologists can identify areas where earthquakes are most likely to occur, but cannot yet predict the exact time and place.

2. Preparation:

- a) Secure standing objects such as bookcases and water heaters, especially if there is potential for them to fall and hurt occupants.
- b) Provide earthquake safety information to occupants and staff members.

3. Response

a) During the shaking

(1) Keep calm - do not leave the location. Assess the situation, then act. Remember, falling debris is the direct cause of most injuries and deaths.

(2) If indoors - stay there.

(a) Take cover under desks, tables or other heavy furniture.

(b) Take cover in interior doorways or narrow hallways.

(c) Stay away from windows and beware of falling objects.

(3) If outdoors - stay in the open.

(a) Move away from the building, if possible.

(b) Avoid downed utility poles and overhead wires.

b) After the shaking stops

(1) Evacuate - Move to open areas away from the building.

(2) Do not re-enter the building until authorities have checked it for possible structural damage, leaking gas lines and other utility disruptions.

(3) Take a roll call to account for all residents.

(4) If a radio is available, listen for news bulletins.

G. Unexpected Utility Failures: Unexpected utility failures or incidents are common occurrences and may happen at any time. An undetected gas line leak may require only a spark to set off an explosion. Flooding from a broken water main may cause extensive damage to the property and facility and cause power failures. An electrical failure may result in the loss of refrigerated food supplies and medicines or create a severe fire hazard.

1. Warning: In this context, the "unexpected" means that there will be no warning.

2. Preparation

a) Identify the possible effects that the loss of each utility may have on the facility. As an example, loss of electricity might affect the pumping of heating oil and disrupt the heating and cooling system.

b) Inventory the community's resources to locate alternate sources of power and other necessary supplies.

c) Keep an accurate blueprint of all utility lines and pipes associated with the facility and grounds.

d) Develop procedures for an emergency shutdown of utilities.

e) Maintain a list of phone numbers, including night and day emergency reporting and repair services, of all serving utility companies.

f) Minimize threats of failure through the use of good maintenance practices.

3. Response

a) Gas Line Break/Leak

- (1) Evacuate the facility immediately.
- (2) Notify maintenance staff, administrator, local public utility companies and police and fire departments.
- (3) Shut off the main valve.
- (4) Do not re-enter the facility until emergency officials say it is safe.

b) Electric Power Failure

- (1) Notify the electric company.
- (2) Notify the maintenance staff.
- (3) If there is a danger of fire, evacuate the facility.
- (4) If a electrical short is suspected, turn off power at the main control point.

c) Water Main Break

- (1) Call the facility maintenance personnel.
- (2) Shut off the valve at the primary control point.

H. Terrorism/Civil Unrest: It is an unfortunate sign of the world in which we live that there are persons who desire to cause damages similar to the damages caused by natural disasters. Generally a terrorist will inflict damage in order to disrupt the way we do things or to gain attention for his/her cause. The results of these actions are hard to predict, but they are seldom all that different from the results of severe weather or of a hazardous materials release. An important thing to remember is that any terrorist action is illegal, and local police will need to be involved whenever any suspicious activities occur.

1. Warning: most terrorists act without warning.

2. Preparation:

- a) Consider the way that your facility is viewed in the community and the reaction in the media should a terrorist act occur.
- b) Active coordination with local law enforcement will give you a better idea of the vulnerability of your facility to terrorist attack and law enforcement's role in the response to suspicious activity.
- c) Enforce facility security. Restrict visitors to only public areas. If feasible, ensure that all visitors are identified and appropriately cleared before they enter the facility.

3. Response: Response to the consequences of a terrorist act will depend on the hazards presented. Bear in mind that terrorists may have multiple attacks planned. They might use an explosion to get you to evacuate, then use snipers to attack evacuees standing at a rally point.

I. Other Threats: Consideration must also be given to the possibility of other potential disaster situations to which the facility may be vulnerable. As an example, it is likely that residents will be affected by heat in the summer. Less likely is the threat of tidal wave or volcano. Planners must consider all possible situations while concentrating on those which are most likely to occur.